DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/05/2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 5, 6, 8, 16, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speeter (U.S. Pat. No. 5479528) in view of Ivanov (U.S. Pub. No. 20040031180) and Fujieda (U.S. Pat. No. 7181052).

Regarding claims 1 and 8, Speeter discloses a system and method for identifying a person (Abstract), comprising the means and steps of: detecting and producing a characteristic of pressures, exerted by at least one foot of the person on a surface (Abstract; col. 3, lines 1-3; col. 9, lines 24-29); storing data for each of a plurality of

persons, said data comprising the detected characteristic of pressures and an associated person identification code (Abstract; col. 9, lines 29-32); and comparing a detected pattern of the pressure characteristic with pre-stored pattern of the pressures characteristic to find a stored pattern of the pressure characteristic, if any, that matches the detected pattern (Abstract; cols. 2-3, lines 65-3; col. 9, lines 24-32).

Speeter does not mention expressly: said characteristic of pressures is a pressure distribution pattern which represents a distribution of pressure per unit area exerted by at least one foot of the person on a surface; and wherein said pressure distribution pattern is a pressure distribution image pattern of the distribution of pressure per unit area.

Ivanov discloses a system and method for identifying a person (Abstract), comprising: detecting a pressure distribution pattern which represents a distribution of pressure per unit area exerted by at least one foot of the person on a surface (Abstract; section 0044); and comparing a detected pressure distribution pattern with pre-stored pressure distribution patterns until a match of pressures distribution patterns is found (Abstract)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Speeter as taught by Ivanov to characterize the pressures exerted by the person by a distribution of pressure fields on smaller or larger areas using various numbers of pixels, and use the distribution of pressures as a pressure signature profile to perform a pattern match such that the

pattern match includes criteria of not only the outline of the pattern but also any variances in pressure applied over the area (Ivanov, section 0008).

Fujieda discloses a system and method for identifying a person (Abstract), comprising: detecting a pressure distribution pattern which represents a distribution of pressure per unit area exerted by a part of a body of the person to be identified, wherein said pressure distribution pattern is a pressure distribution image pattern of the distribution of pressure per unit area (Abstract; Fig. 10; col. 11, lines 16-25).

Since Speeter, Ivanov and Fujieda all pertain to system and method for identifying a person based on biometric characteristics such as pattern of pressures exerted by a part of the body of the person on a surface, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Speeter and Ivanov by applying Fujieda's image sensor to detect the said pressure distribution pattern, and storing/utilizing such produced pressure distribution image pattern signal/data for pattern match analysis such that a person can be identified with high reliability (Fujieda, col. 3, lines 16-19; col. 14, lines 15-28).

Regarding claim 2, Speeter discloses: the pressure characteristic detecting means comprise a matrix sensor (cols. 2-3, lines 65-3; col. 9, lines 24-32).

Regarding claim 3, Speeter discloses: said surface comprises a pressure detector layer (col. 4, lines 20-26).

Regarding claims 5 and 6, the combination of Speeter, Ivanov and Fujieda teaches the system and method including the subject matter discussed above. Speeter further discloses: a processor having a storage medium for storing data (col. 7, lines 3-

10); and the processor further comprises a comparator for comparing a detected pressure characteristic pattern with the stored pressure characteristic patterns (Figs. 7 and 8; col. 7, lines 3-10; col. 8, lines 31-40).

Regarding claim 16, Speeter discloses the system and method of identifying a person including the subject matter discussed above except: the method further comprises identifying a user of a weighing device.

Speeter teaches reconfiguring the system and applying the method to implement different devices of intelligent work surfaces (col. 1, lines 67).

In view of the teaching of Speeter, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the method of Speeter to a user of a weighing device as an intended use of the invention. It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Regarding claims 17 and 19, the combination of Speeter, Ivanov and Fujieda teaches the system and method including the subject matter discussed above. Speeter further teaches an act or means of identifying the person according to a person identification code associated with a stored pressure distribution pattern that is found to

match the detected pressure distribution pattern of the person (col. 9, lines 29-32, it is well known that each item of a library system is identified by a cod or an index number).

4. Claims 4, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speeter in view of Ivanov and Fujieda, as applied to claims 1 and 8 above, and further in view of Wymore (U.S. Pat. No. 6515586).

Regarding claim 4, Speeter in view of Ivanov and Fujieda disclose the system and method including the subject matter discussed above except: the pressure distribution detecting means and step comprise a matrix of electrical contacts, with a rubber having a pressure-dependent conductivity being placed between these contacts.

Wymore teach a sensory system and method detecting pressure distribution over a surface (col. 2, lines 50-67; col. 9, lines 37-67), including: a matrix of electrical contacts, with a rubber having a pressure-dependent conductivity being placed between these contacts (col. 2, lines 50-67; col. 5, lines 46-59; col. 9, lines 37-67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wymore in the combination of Speeter, Ivanov and Fujieda in order to provide a flexible, adjustable in size, accurate and robust sensor surface for detecting footprint of a user (Wymore, col. 2, lines 5-9; col. 10, lines 1-21).

Regarding claims 7 and 9, Speeter in view of Ivanov and Fujieda disclose the system and method including the subject matter discussed above except: said system and method comprises a system and method for identifying a user of a weighing device.

The disclosure of Wymore teaches: said system and method identifying a user of a weighing device (col. 2, lines 50-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wymore in the combination of Speeter, Ivanov and Fujieda in order to provide a system and method of detecting pressure distribution that can be adapted for detecting a user of a weighing device (Wymore, col. 2, lines 5-9; col. 9, lines 37-67; col. 10, lines 1-21).

5. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speeter in view of Ivanov and Fujieda, as applied to claims 1 and 8 above, and further in view of Koelsch (DE 3731773 C).

Regarding claims 18 and 20, Speeter in view of Ivanov and Fujieda disclose the system and method including the subject matter discussed above except: an act or means of determining a weight of the person based on the detected pressure distribution pattern of the person.

Koelsch discloses restricted area entry control counteracts manipulation by using pressure sensors detecting personal features e.g. size, dynamic pressure, profile, including an act or means of determining a weight of the person based on a detected pressure distribution pattern of the person (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Koelsch in the combination of Speeter, Ivanov and Fujieda in order to provide a system and method for identifying a person of

walking through a sensing mat by analyzing or matching the person's biometric data including shoe size, pressure distribution, body weight, etc. (Koelsch, Abstract).

Allowable Subject Matter

6. Claims 21-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

7. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claims 21-26 is the inclusion of the limitation that the means for comparing comprises a means for minimizing differences between the detected pressure distribution image pattern as compared with each one of the stored pressure distribution image patterns. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

8. Applicant's arguments received 06/09/2009 with respect to claims 1-9 and 16-20 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-9 and 16-20 are rejected as ground(s) has been found from a new prior art reference (U.S. Pat. No. 7181052 to Fujieda) to teach the newly added limitation regarding producing and utilizing image data/signal representing the distribution of pressure per unit area. Detailed response is given in sections 3-5 as set forth above in this Office action.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/X. S./
Examiner, Art Unit 2863

/Tung S. Lau/
Primary Examiner, Art Unit 2863
August 12, 2009